



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,119	12/17/2001	James A. Green SR.	850-19	7619

7590 06/16/2004

NIXON & VANDERHYE P.C.
8th Floor
1100 North Glebe Road
Arlington, VA 22201-4714

EXAMINER

VUONG, QUOCHIE B

ART UNIT	PAPER NUMBER
----------	--------------

2685

14

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/016,119

Applicant(s)

GREEN ET AL.

Examiner

Quochien B Vuong

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11, 12, 15, 16 and 18-35 is/are rejected.
- 7) ☒ Claim(s) 9, 10, 13, 14 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6, 8, 9, 11.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDSs) submitted on 11/08/02, 05/03/03, 08/18/03, and 11/19/03 are in compliance with the provisions of 37 CFR 1.97.

Accordingly, the information disclosure statements are being considered by the examiner.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-8, 11-12, 15-16, 19-32, and 34-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 6,122,482. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

As to claims 1-8, 11-12, 15-16, 19-32, and 34-35, claim 14 of U.S. Patent No. 6,122,482 encompasses all the limitations including a satellite broadcasting system comprising: a satellite dish antenna receiving first and second polarization signal blocks from at least one satellite; a block frequency converter coupled to receive the received signal blocks, the block frequency converter frequency-converting the first polarization and the second polarization signal blocks received from said satellite to different frequency blocks; and an amplifier arrangement coupled to said block frequency converter, said amplifier arrangement amplifying said converted signal blocks and applying said signal blocks simultaneously to a single coaxial cable for enabling said two different blocks to be distributed simultaneously via said single coaxial cable; a satellite receiver coupled to the cable; a power source coupled to said block frequency converter, wherein said block frequency converter provides for said signals to be converted separately and independently by said satellite receiver, wherein said block frequency converter allows said signals to be selectively converted to said satellite receiver; a switch for selecting between said blocks to be selectively converted by said satellite receiver, wherein said block frequency converter includes a first converting means for converting said signals of a first polarization direction to a desired first frequency block and a second converting means for converting said signals of a second polarization direction to a desired second frequency block, wherein said first converting means includes a first down converter which is coupled to an amplifier and said second converting means includes an up converted coupled to a second down

Art Unit: 2685

converter and a joining means is coupled to said amplifier and said second down converting means; a splitter to split and divide said signals from said single coaxial cable to enable said signals to be transmitted to a first converting means for converting said signals of a first polarization direction to a desired first frequency for said satellite receiver and a second converting means for converting said signals of a second polarization direction to a desired second frequency for said satellite receiver, wherein said first converting means includes a first up converter which is coupled to said splitter and a first down converter is coupled to said first up converter, said first down converter being coupled to said satellite receiver via a first signal line, said second converting means including a second up converter coupled to said splitter, and said second up converter is coupled to said satellite receiver via a second conduit.

Claim 14 of U.S. Patent No. 6,122,482 of does not specifically disclose the first polarization is vertical polarization, and the second polarization is horizontal polarization. However, examiner takes Official notice that vertical and horizontal polarization signals are well known for use in communications system. Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the vertical and horizontal polarization signals to the first and second polarization signals as a system design preference to perform the same function as processing two different polarization signals.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8, 11-12, 15-16, and 19-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Uemura (JP 2-140022 English translation provided by the Applicant).

Regarding claims 1 and 22, Uemura (figures 1-2) discloses a satellite broadcasting and distributing system comprising: a satellite dish antenna receiving vertical and horizontal polarization signal blocks from at least one satellite (page 10, lines 1-5); a block frequency converter coupled to receive the received signal blocks, the block frequency converter frequency-converting the vertical polarization and the horizontal polarization signal blocks received from said satellite to different frequency blocks; and an amplifier arrangement coupled to said block frequency converter, said amplifier arrangement amplifying said converted signal blocks and applying said signal blocks simultaneously to a single coaxial cable for enabling said two different blocks to be distributed simultaneously via said single coaxial cable (see page 5, last paragraph – page 8, 1st paragraph).

Regarding claims 2-8, 11-12, 15-16, 19-21, 23-32, and 34-35, Uemura further discloses a satellite receiver coupled to the cable; a power source coupled to said block frequency converter, wherein said block frequency converter provides for said signals to

Art Unit: 2685

be converted separately and independently by said satellite receiver, wherein said block frequency converter allows said signals to be selectively converted to said satellite receiver; a switch for selecting between said blocks to be selectively converted by said satellite receiver, wherein said block frequency converter includes a first converting means for converting said signals of a first polarization direction to a desired first frequency block and a second converting means for converting said signals of a second polarization direction to a desired second frequency block, wherein said first converting means includes a first down converter which is coupled to an amplifier and said second converting means includes an up converted coupled to a second down converter and a joining means is coupled to said amplifier and said second down converting means; a splitter to split and divide said signals from said single coaxial cable to enable said signals to be transmitted to a first converting means for converting said signals of a first polarization direction to a desired first frequency for said satellite receiver and a second converting means for converting said signals of a second polarization direction to a desired second frequency for said satellite receiver, wherein said first converting means includes a first up converter which is coupled to said splitter and a first down converter is coupled to said first up converter, said first down converter being coupled to said satellite receiver via a first signal line, said second converting means including a second up converter coupled to said splitter, and said second up converter is coupled to said satellite receiver via a second conduit (see page 3, last paragraph - page 8, 1st paragraph).

Allowable Subject Matter

6. Claims 9, 10, 13, 14, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 9, 10, 13, 14, and 17, Uemura and the cited prior art fail to disclose the joining means includes a four way splitter and a phase lock loop is coupled to the four way splitter.

Conclusion

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA 22202. Sixth Floor (Receptionist).

Any inquiry concerning this communication from the examiner should be directed to Quochien B. Vuong whose telephone number is (703) 306-4530. The examiner can normally be reached on Monday through Friday from 9:30 a.m. to 6:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached on (703) 305-4385.

Application/Control Number: 10/016,119

Page 8

Art Unit: 2685

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service whose telephone number is (703) 306-0377.



QUOCHIE B. VUONG
PRIMARY EXAMINER

Quochien B. Vuong

June 03, 2004.